

# Welcome

## HIGHWAY 212



## Corridor Access Management, Safety & Phasing Plan

## Meetings

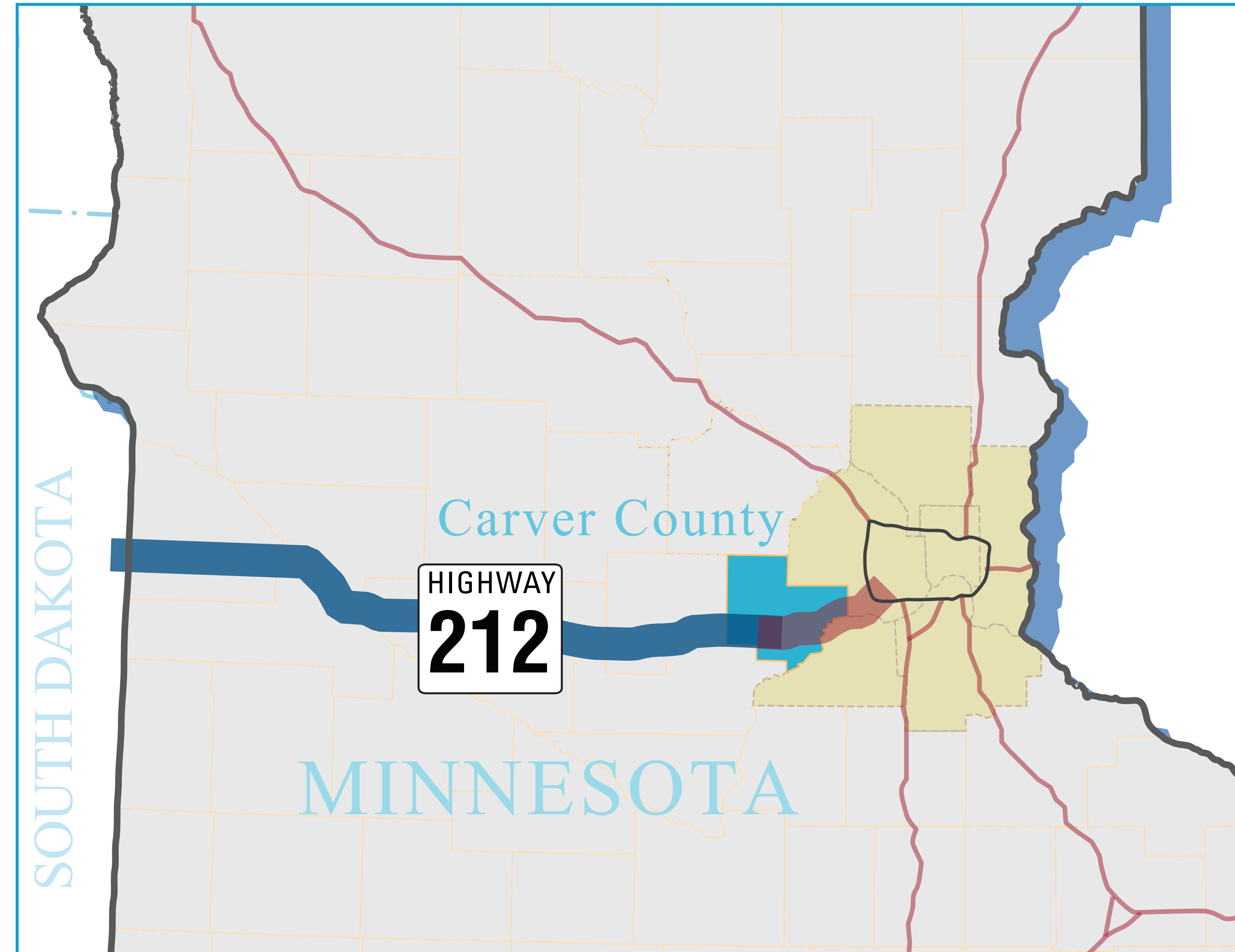
- 5:30 to 6:30 p.m. - **Southwest Corridor Transportation Coalition**
- 6:30 to 8:00 p.m. - **Open House**



# Why is Highway 212 Project Important?

## Important Arterial Route

- Highway 212 is a major route that connects many communities in western Minnesota with the Twin Cities.



## Local Support

- 41 agencies passed resolutions supporting the upgrade to Highway 212 in Carver County.

## Two-Lane Gaps (IRC Metro)

- Highway 212 in Carver County is the only two-lane Interregional Corridor (IRC) in the seven county metro area.

## Significant Freight Use

- Over three million truck miles are traveled on the corridor annually. This accounts for 13 to 15% of the usage on the corridor, which exceeds MnDOT's typical volume of 8 to 10%.

# Study Background

- The purpose of the Highway 212 Corridor project is to improve access management and safety in the corridor, while working towards the long-term conversion of the corridor to a four-lane facility. Key objectives throughout this study include the following:
  - ✓ Improve safety and access management through interim improvements.
  - ✓ Ready interim improvements for implementation.
  - ✓ Increase project readiness of the Cologne to Carver segment for future highway expansion.
  - ✓ Develop potential funding strategies and seek funding.
  - ✓ Coordinate and communicate with project partners and the public.

## Project Contact Information:

Carver County Project Contact:  
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MnDOT Project Contact:  
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## Project Partners

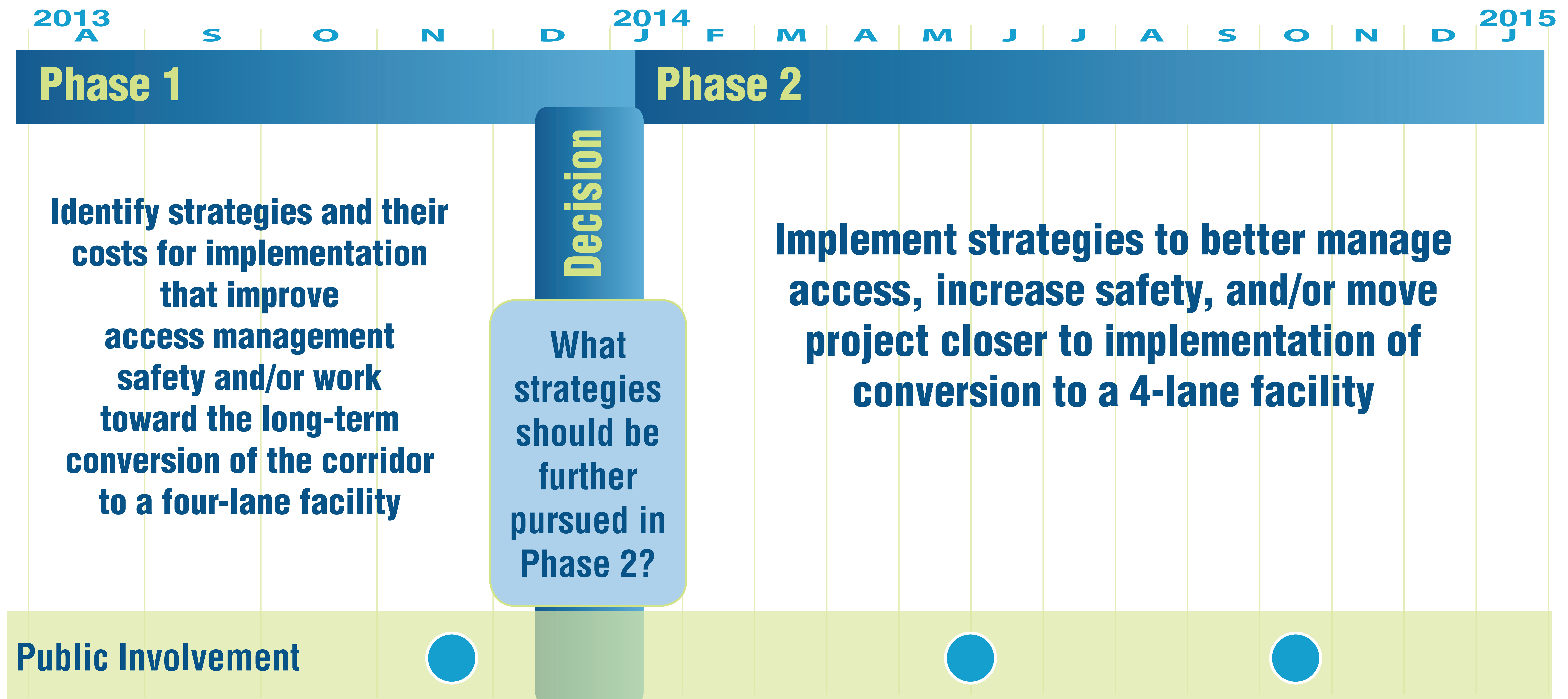




# Project Timeframe

This 18 month effort will occur in two phases. The first phase is expected to end in January/February of 2014.

The second phase will begin in early 2014 and continue until the end of 2014.

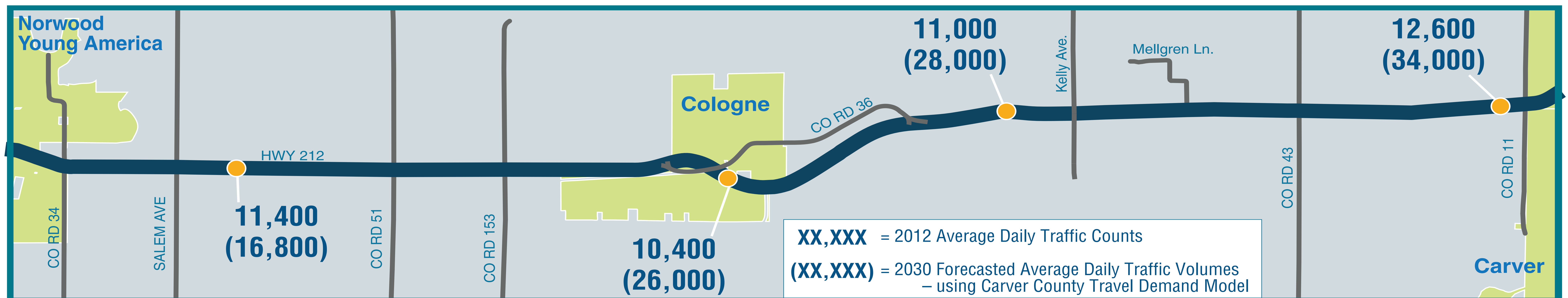


# What are Highway 212's Key Issues?

## Traffic Volumes

1. Based on projected demographic changes, traffic volumes in year 2030 are projected to increase to 16,800 (west end) and 34,000 (east end) vehicles per day. This is two to three times the existing traffic volumes.
2. Over three million heavy commercial vehicle miles are traveled annually, or 61,500 commercial vehicle hours annually.
3. A 4-lane Highway 212 will save heavy commercial vehicles 10,500 hours annually.
4. As traffic volumes continue to grow on the corridor, the capacity of the existing two-lane facility during peak periods will be exceeded. This will cause more delay to the side street traffic wanting to access Highway 212.

## Traffic Volumes



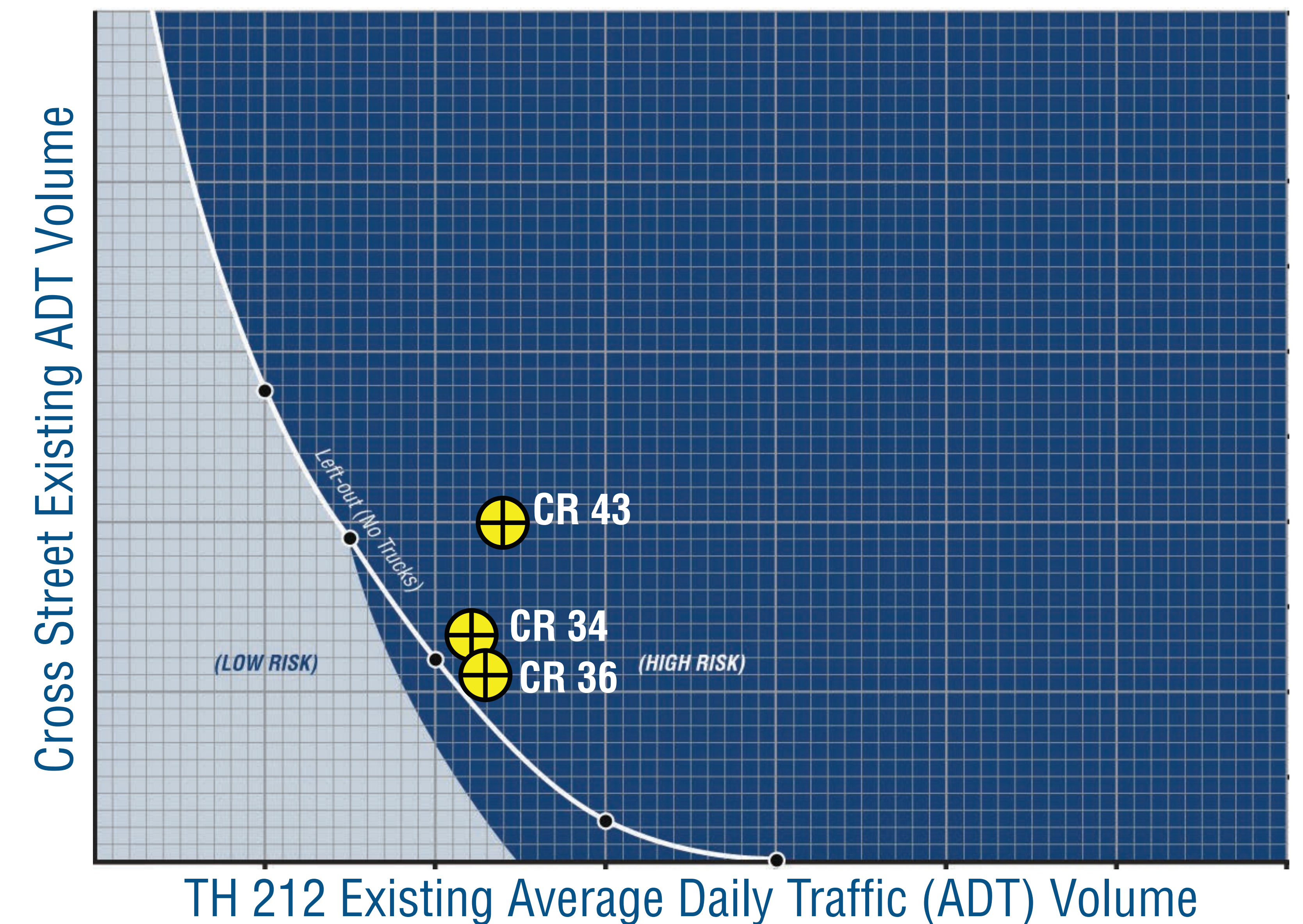


# What are Highway 212's Key Issues?

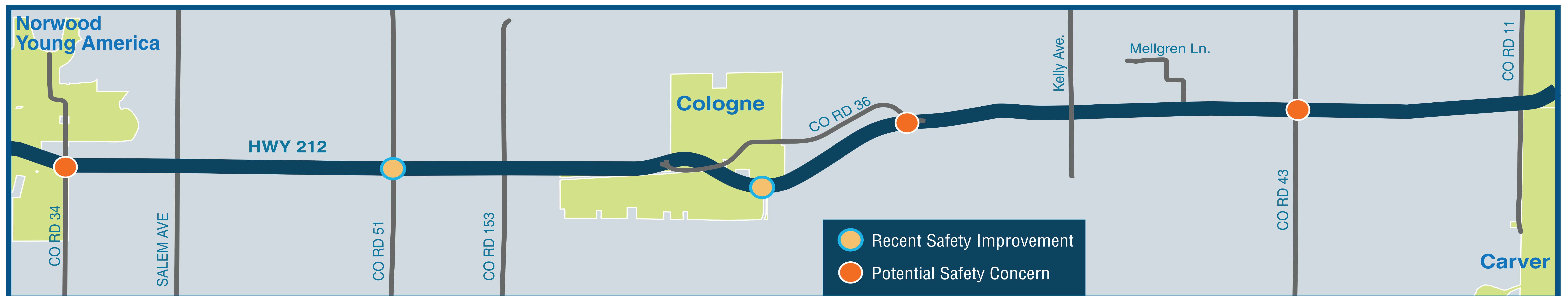
## Safety

- The segment between Carver and Cologne has two intersections that exceed the critical crash rate\* and are high-risk intersections (CR 36 & CR 43). This is a result of large traffic volumes along the corridor and side streets, which impact the safety of vehicles entering or crossing Highway 212.
- The segment between Norwood Young America & Cologne has one intersection that exceeds the critical crash rate\* and is a high-risk intersection (CR 34).

## Two-Lane Roadway & Gap Assessment



## Highway 212 Safety Analysis



Crashes analyzed are over the last 5-years (2008-2012). Crash rates are compared to other similar segments and intersections to determine safety concerns.

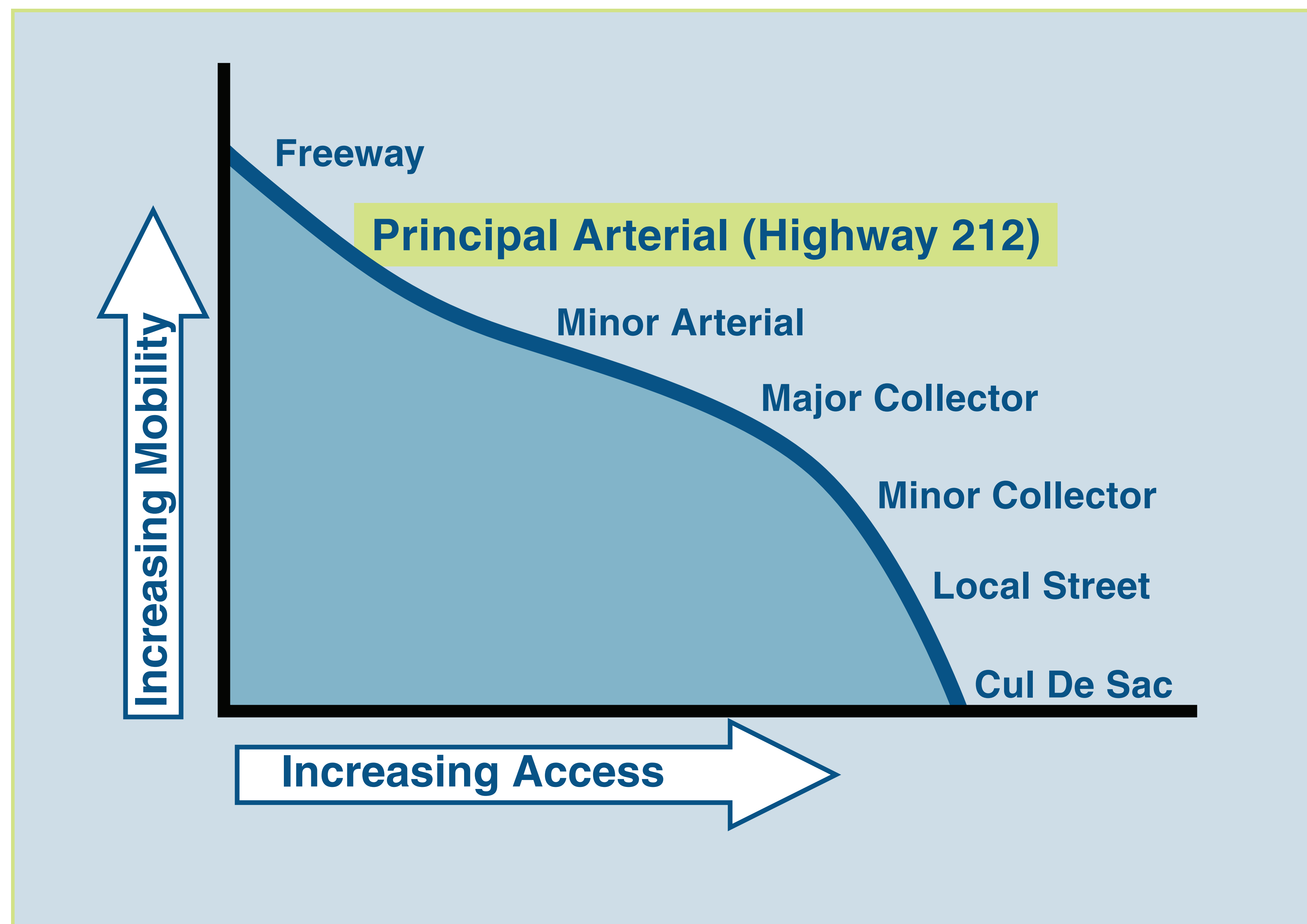
\* The critical crash rate is calculated to determine the statistical significance of the actual crash rates. If the actual crash rate is above the critical crash rate, the crashes can be considered related to a geometric design or traffic control issues. If it is below the critical crash rate, the crashes can be considered to have occurred randomly.



# Access Management

## Access & Mobility

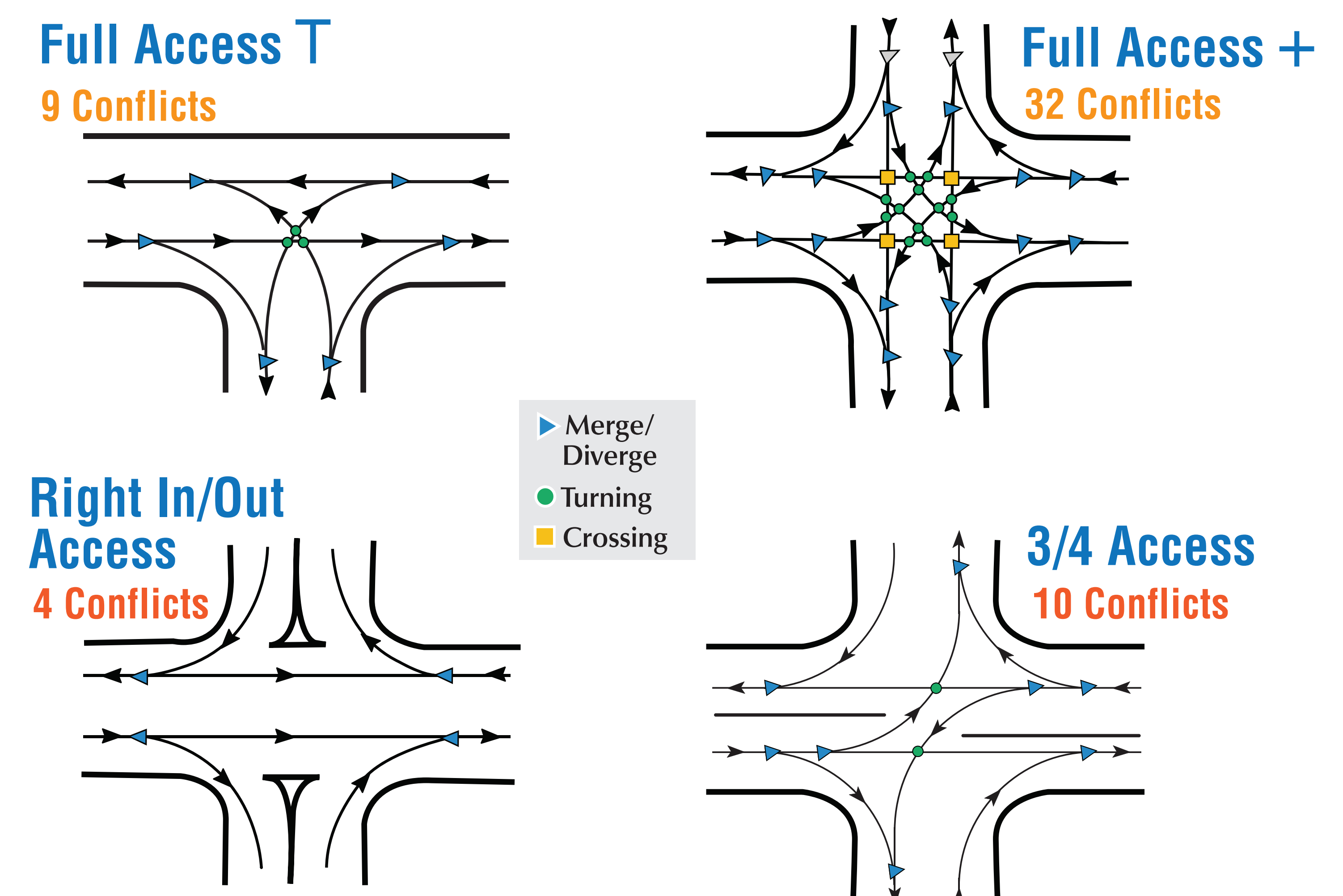
- The level of access has a direct impact on roadway operations and safety.
- Highway 212 is designated as a Principal Arterial, which is intended to provide more mobility while limiting access.



## Conflict Points

- Conflict points are locations in or on the approaches to an intersection where vehicle paths merge, diverge or cross.
- The actual number of conflicts at an intersection is a function of the number of approaching legs and the allowed vehicle movements.

### Conflict Points - Schematics



	Typical Crash Rate (crashes per mil. entering vehicles)	
	Total	
Full Access +	32	0.3 <sup>(1)</sup>
Full Access T	9	0.3 <sup>(2)</sup>
3/4 Access	10	0.2 <sup>(3)</sup>
Right In/Out Access	4	0.1 <sup>(3)</sup>

<sup>(1)</sup> 2004-2006 Minnesota TIS Crash Data

<sup>(2)</sup> Estimated based on Publication FHWA-RD-91-048

<sup>(3)</sup> Estimated based on a limited sample of Mn/DOT data

# Existing Access & Potential Conflict Points

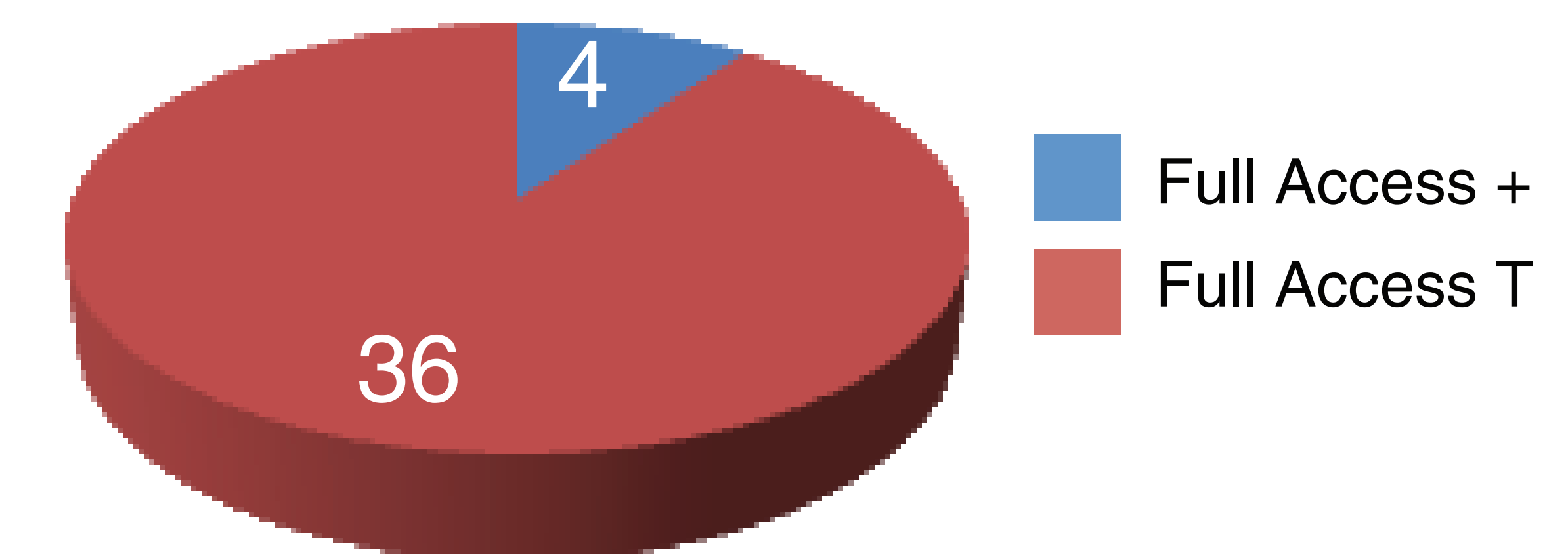
## Norwood Young America to Cologne

- 40 Existing Access Points = 452 Potential Conflict Points

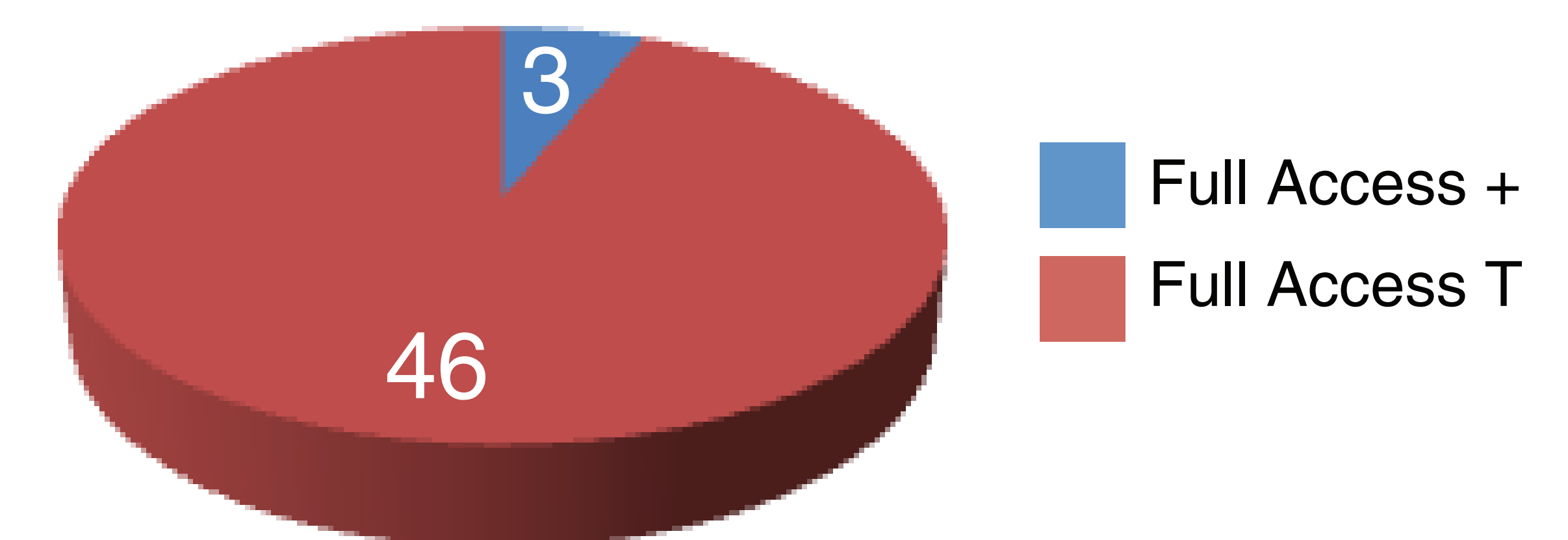
## Cologne to Carver

- 49 Access Points = 510 Potential Conflict Points

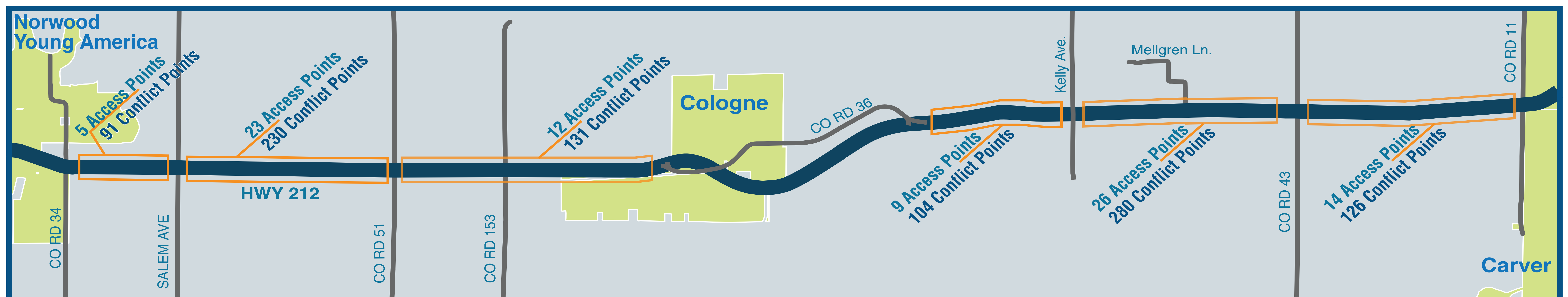
Number of Full Access Points from Norwood Young America to Cologne



Number of Full Access Points from Cologne to Carver



## Existing Access Points & Potential Conflict Points



**CHALLENGE:** How do we accommodate corridor users & property owners, and also increase safety & mobility?



# Funding Challenges (Facts)

1. State transportation funding levels are projected to decline based on current revenue sources.
2. Federal transportation funding levels are uncertain: the current Federal Transportation Bill expires on September 30, 2014.
3. Vehicles are more efficient - more miles are driven for fuel used (fewer taxes are paid that go to maintain/improve the system).
4. Buying power is being reduced (same dollar buys less).  
Inflation is reducing the ability to improve infrastructure.

## Conclusion

**“Transportation funding is becoming more uncertain and more competitive. Thus, it is difficult to find sufficient funds to maintain the current system let alone \$10 million, \$20 million, \$30 million, or \$80 million to implement the ultimate four-lane vision between Cologne and Carver.”**



# Implementation Challenges

**“Can we find a solution to improve Highway 212  
in stages between Cologne & Carver,  
or find alternative solutions that cost less money?”**

## Option 1

**Ultimate – 4-Lane Vision**  
(2009 plan new facility on new alignment)

**\$75 - 85 million**

## Option 2

**Modified – 4-Lane**  
(uses existing mainline for half of the 4-lanes)

**\$40 - 50 million**

— or —  
|

**Option 3: Hybrid of 1 & 2**



# Options to Consider - Cologne to Carver

## Option 1

- More ROW acres impacted
- Improves safety (Divided 4-Lane)
  - ✓ Reduces conflicts by 68%
- Increases mobility
- Project cost \$75-85 million.  
This level of funding is difficult to find
- Can be phased in segments
- Would require update of Environmental Document and review of Preliminary Design
- Potential turnbacks to townships
- Less maintenance costs in the long term
- Provides frontage roads
- Moves both directions of travel away from some residents
- Official map is completed

## Option 2

- Fewer ROW acres impacted  
(more remain for private use)
- Improves safety (Divided 4-Lane)
  - ✓ Reduces conflicts by 54%
- Increases mobility
- Project cost \$40-50 million (\$25-45 million) less than Option 1. This level of funding is difficult to find but is substantially less than Option 1
- Can be phased in segments
- Would require update of Environmental Document and Preliminary Design
- Minimal need for turnbacks to townships
- More maintenance costs in the short term
- Provides no frontage road system
- Leaves at least one direction of travel near some residents
- Would require revisions to the official map